

REMARKS

Claim 13 is pending in the present application.

35 U.S.C. § 103(a) Rejection

Claim 13 is rejected under 35 U.S.C. § 103(a) over Oya (Japanese Published Application No. (A) 11-278287) in view of Urschel (U.S. Patent No. 1,983,584).

Claim 13 recites:

A hollow rack shaft which is formed cylindrically by bending a straight plate having wider and narrower width parts so that two sides of the plate are joined, wherein in a part of a surface of the plate a row of rack teeth is formed along a direction of an axis of the plate, and wherein:

said rack shaft is provided with a first area and second areas on both sides of said first area;

wherein in said first area, the row of rack teeth and a semi-cylindrical part on a reverse side of the row of rack teeth are formed; and

in each of said second areas, a respective complete cylindrical part is formed and at least one of the respective complete cylindrical parts has an outer diameter smaller than an outer diameter of the semi-cylindrical part in said first area.

As acknowledged in the present Office Action, Oya fails to disclose a rack shaft having a second area with a smaller outer diameter than that of a first area.

On the other hand, the present Office Action alleges that this limitation is rendered obvious by combining the teachings of Urschel and Oya. Specifically, the Office Action alleges that because Urschel shows a metal tube in Fig. 20 having areas with different diameters, it would have been obvious to alter diameters of the rack shaft of Oya for the purpose of reducing the mass of the shaft. This allegation is respectfully traversed as follows. First, Urschel does not teach altering diameters of a tube or shaft in order to reduce mass. Instead, Urschel states that "portions are shaped as may be desired and

according to the use to which the structure is to be subjected.” (Urschel, page 3, col. 2, lines 36-39). Second, there is nothing in Oya or Urschel to suggest that, based on the use to which a rack shaft is to be subjected, a diameter of one area should be smaller than that of another. Thus, Oya and Urschel do not provide the alleged motivation related to reduction of mass, or any other motivation for making the combination of these references as proposed by the present Office Action. Therefore, the proposed combination of Oya and Urschel cannot render obvious claim 13.

Accordingly, it is respectfully requested that the rejection of claim 13 under 35 U.S.C. § 103(a) over Oya in view of Urschel be reconsidered and withdrawn.

CONCLUSION

In view of the foregoing remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.


If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any fee required for such Petition for Extension of Time, and any other fee required by this document, other than the issue fee, and not submitted herewith, should be

Application No. 10/918,117
Amendment dated July 6, 2004
Reply to Office Action of April 9, 2004

charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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July 6, 2004

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